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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,268	10/20/2003	Alexander I. Shakhnovich	03058	2890

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EXAMINER

FAISON GEE, VERONICA FAYE

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/689,268

Applicant(s)

SHAKHNOVICH, ALEXANDER I.

Examiner

Veronica Faison-Gee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 20-22 is/are rejected.
- 7) ☒ Claim(s) 16-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION***Response to Amendment***

Claims 23-38 have been canceled. Hence, claims 1-22 are pending in the application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

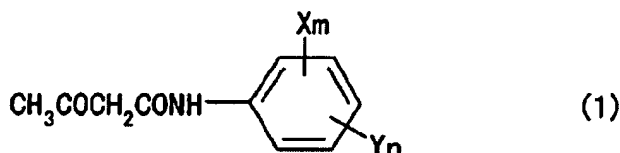
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 12-15 and 20-22 are rejected under 35 U.S.C. 102(e) as being anticipated by EP 1 316 588.

EP 1 316 588 teaches pigment yellow 74 is obtained by coupling a coupler component comprising 2-methoxyacetoacetanilide and acetoacetanilide derivative of formula (1), and diazo component obtained by diazotizing 2-methoxy-4-nitroaniline.



X = CONR₁R₂, SO₂NR₁R₂, NHCOR₁, CONH(CH₂)_kNR₁R₂ or SO₂NH(CH₂)_kNR₁R₂;

R₁ and R₂ = hydrogen atom or alkyl group or together form a cyclic structure; k = 1-4;

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$m = 1$ or 2 ; $Y = R_3, OR_3, COOH$ or SO_3H ; $R_3 =$ same as R_2 ; and $n = 0-2$. The coupler component contains 0.1-10 mol% of acetoacetanilide derivative with respect to 2-methoxyacetoacetanilide (abstract, 0007, 0015). The reference further teaches that pigment yellow 74 may be used in a printing ink that may be a water-based composition (abstract and 0021). The composition as taught by EP 1 316 588 appears to anticipate the claimed invention.

Claims 1-4, 7 and 8 rejected under 35 U.S.C. 102(b) as being anticipated by Jung et al (US Patent 5,559,216).

Jung et al teach a disazo pigment which comprises a) azo coupling in an aqueous medium and in the absence of an organic solvent in a single step and b) adding at the latest immediately prior to the isolation of the disazo pigment at least one nonionic surfactant which has a cloud point in aqueous solution (abstract and col. 1 line 58-col. 2 line 13). The reference further teaches that the process is carried out by diazotizing one or more different amine of formula $D-NH_2$. Suitable diazo components $D-NH_{sub.2}$ are diazotizable aromatic amines, in particular anilines, aminoanthraquinones and heterocyclic aromatic amines, and the diazotizable amines may each have one or more substituents (col. 3 line 51-col. 4 line 28). The coupling reaction is carried out in a conventional manner in an aqueous medium by :

a) adding a solution of the diazonium salt to a suspension or dispersion of the coupling component, or

b) simultaneously metering a solution of the diazonium salt and a solution, suspension or dispersion of the coupling component into a buffer solution or into a mixing nozzle, or

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c) adding a solution of the coupling component to a solution of the diazonium salt, or

d) adding a suspension or dispersion of the coupling component to a solution of the diazonium salt. (col. 8 lines 5-18).

The reference further teaches that the pigment may be suitable for printing inks (col. 8 lines 51-54). The composition as taught by Jung et al appears to anticipate the claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Platman et al (US Patent 5,246,494) in view Johnson et al (US Patent 5,837,045).

Platman et al teach a mixed coupled azo pigment prepared from 30 to 70 percent of two or more diazonium components and an organic coupling component (abstract and col. 3 lines 1-32). The pigments may be used in inks, plastics and coatings (col. 3 lines 38-40). The mixed coupled azo pigment are prepared by initially diazotizing a mixture of two or more aromatic amine compounds to form a mixture of diazonium salts and thereafter coupling the mixture of diazonium salts with a coupling component to form the azo pigment (col. 4 lines 39-45). The aromatic amines also contain one or more acid groups (Y) which may be -COOH, -SO₃H or the esters or amides or alkali or alkaline earth metal salts thereof (col. 5 lines 11-33). The coupling

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component may be any compound capable of coupling the diazonium components (col. 6 lines 59-64). The reference remains silent the pigment dispersibility without a dispersant. The pigment inherently has acid groups attached to the surface which would make it dispersible without a dispersant. The reference fails to teach an ink jet ink composition.

Johnson et al teach a surface modified colored pigment which comprises at least one aromatic group and at least one ionic or ionizable group or a mixture of an ionic group or ionizable group, wherein the pigment may be an azo pigment (abstract, col. 2 lines 47-55 and col. 3 lines 9-18). The reference further teaches that the pigment may be used in an aqueous system wherein the amount of water is in the range from about 50 to about 95 percent by weight (col. 5 lines 8-14). Therefore it would have been obvious to one of ordinary skill in the art to use the pigment as taught by Platman in the ink composition of Johnson et al because Johnson et al teaches similar pigment composition as disclosed by Platman.

Response to Arguments

Applicant's arguments filed 8-22-06 have been fully considered but they are not persuasive.

Applicant argues that "Applicant does not believe that the pigments would inherently be dispersible. The acid groups are not attached to the surface of the pigment but are rather present with the bulk of the pigment. Thus, the pigment of Platman et al is not a surface-modified pigment."

If a prima facie case of obviousness is established, the burden shifts to the applicant to come forward with arguments and/or evidence to rebut the prima facie case. See, e.g., *Dillon*, 919 F.2d at 692, 16 USPQ2d at 1901. Rebuttal evidence and arguments can be presented in the specification, *In re Soni*, 54 F.3d 746, 750, 34 USPQ2d 1684, 1687 (Fed. Cir. 1995), by counsel, *In re Chu*, 66 F.3d 292, 299, 36 USPQ2d 1089, 1094-95 (Fed. Cir. 1995), or by way of an affidavit or declaration under 37 CFR 1.132, e.g., *Soni*, 54 F.3d at 750, 34 USPQ2d at 1687; *In re Piasecki*, 745 F.2d 1468, 1474, 223 USPQ 785, 789-90 (Fed. Cir. 1984). However, arguments of counsel cannot take the place of factually supported objective evidence. See, e.g., *In re Huang*, 100 F.3d 135, 139-40, 40 USPQ2d 1685, 1689 (Fed. Cir. 1996); *In re De Blauwe*, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984).

Allowable Subject Matter

The indicated allowability of claims 12-22 is withdrawn in view of the newly discovered reference(s) to EP 1 316 588 and 5,559,216. Rejections based on the newly cited reference(s) follow.

Claims 16-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The references alone or in combination fail to teach the specific azo couplers set forth in claims 16-19.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Veronica Faison-Gee whose telephone number is 571-272-1366. The examiner can normally be reached on Monday-Thursday and alternate Fridays 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

vfg
11-3-06


J.A. DORENGO
SUPERVISORY PATENT EXAMINER